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Dr. ASA FITCH.

Dr. Asa Fitch was a son of Hon. Asa Fitch, M.D., and was born Feb. 24, 1809, at Fitch's Point, Salem, Washington County, N. Y., and died at his home April 7, 1879, aged 70 years. In the death of Dr. Fitch Economic Entomology, in this country, lost one of its ablest votaries, who spent the larger part of his life in the untiring and successful study of the insects injurious to agriculture and horticulture. While his earlier writings were contemporaneous with those of Harris, and his later ones with those of Walsh, he will, judged by the work he did, take a high rank among the fathers of applied entomology in America. He practised medicine for eight years, but in 1838 gave it up to assume the management of his father's business. From this time on he devoted himself to agricultural pursuits, which gave more opportunities for investigations in entomology. He was appointed State Entomologist of New York, which position he held for seventeen years, and among other things published fourteen reports on the noxious, beneficial and other insects of the State of New York.

NOTES ON EUROPEAN ENTOMOLOGICAL COLLECTIONS.

By PHILIP P. CALVERT, Ph.D.

(See the NEWS for January, 1896, vol. vii, p. 4.)

II.—OXFORD.

The entomological collections of the University of Oxford are contained in a series of rooms on the second floor of the University Museum, which also accommodates the zoological collections in general, the zoological laboratories and library. Prof. Edward B. Poulton, the present occupant of the Hope Professorship of Zoology as successor to the late Prof. J. O. Westwood, and Curator of the Entomological Department, has kindly furnished the following notes on the insects:

"The foundation of the Oxford Collection is the Saunders' Collection bought by the Rev. F. W. Hope and presented by him with his other collections and a very complete library to the University, together with the endowment of the Hope Chair and a small endowment for keeping up the collections. Other important collections now in the Hope Department are those of Miers and of Burchell; all these three extend into all Insect Orders, but the Coleoptera are probably the most complete. There is also the Bell Collection of Crustacea, containing numerous Bell types. In the Saunders' Collection are many thousand Walker types; how great a number will not be known until the collections have been carefully studied and each one marked plainly. This we are doing as quickly as possible, but of course it is a tremendous task. The Coleoptera are rich in Hope types. All orders are rich in Westwood types, gradually described by him during his long tenure of the chair and published in his 'Thesaurus,' 'Cabinet of Oriental Entomology,' 'Revisio Mantidarum,' etc. These, too, will require the same careful marking. It is now a matter of investigation to make out the types when any one desires to study them.* There are also some of the types of Haworth's 'Lepidoptera Britannica.' Many of the ob-

* I can personally testify to the truth of this remark of Prof. Poulton's. Mr. McLachlan had told me of the existence, at Oxford, of Rambur's types of Odonata described from the Marchal collection, and these I desired to see. Unfortunately, Prof. Pouiton was absent at the time of my visit, but his Assistant, although unable to give information concerning them, very obligingly gave me full access to the cabinets, and, after some search, guided by a peculiar style of label, and by the French handwriting, I found the specimens in question. They agree with the information given by Rambur concerning the *individuals* he described.

scure groups of insects, such as the Membracidæ, are very rich. There are also many types of Stoll, Boisduval, Saunders and others, but really we do not yet know at all fully the treasures of the collection until it has been gone through and arranged properly. The late Professor, who knew it thoroughly, never left a complete account of it and a great deal will require learning over again. The Pierinæ and the Sphingidæ are now rearranged, but these groups contain few types, and the moths generally have been studied, the Oriental by Col. Swinhoe, the American by Mr. W. Schaus. The Cicadas are now being done, and the Membracidæ by Canon W. W. Fowler; the former contain some types of Stoll.

Many of our specimens are of great interest, being Wallace's Malay specimens, and many collected by Bates, on the Amazons, and by Belt, in Nicaragua, but the Wallace are the richest and the most interesting in this collection."

III.—CAMBRIDGE.

Here, as at the sister University, the University Museum building shelters the Entomological collections, as well as those of other branches of zoology and the zoological laboratories. To the kindness of Dr. David Sharp, Curator of Insects, the following notice is due :

"The Museum has a general collection of British Insects which, however, is in certain groups of a deplorably minus character. It possesses the European collection of Coleoptera of the late G. R. Crotch, and his typical collection illustrating his works on Erotylidæ and Coccinellidæ There is also a small lot of exotic insects, most of which were presented by the late Neville Goodman, and were collected by him in the Amazons Valley and in South Africa.

"At present we have in the Museum a quite wonderful collection of Termites and parts of their Termitaria, formed by Mr. Haviland, chiefly in Borneo and Singapore. This collection differs from all others as it was made entirely from the nests themselves, and thus contains the various forms of each species which are wanting in all other collections so far as I know. I hope Mr. Haviland may be able to describe this collection which consists of about 90 species, of which probably as many as 75 or 80 are new."

RAVAGES OF DERMESTES VULPINUS IN CORK.

By W. J. Holland, Ph.D., F.Z.S., Etc.

Messrs. Armstrong, Brothers & Company, of Pittsburgh, who are the largest manufacturers of cork in the United States, recently sent me a couple of specimens of cork which had been completely riddled by *Dermestes vulpinus*. A bottle cork one inch in diameter and one and one-third inches in length had in it five burrows, or tunnels, each containing an adult *Dermestes* with the larval exuvium closing the orifice by which entrance had been gained. Messrs. Armstrong Brothers reported to me that a large invoice of cork from Spain had been found to be infested by these insects, occasioning a loss of fully two per cent.

The destructive character of this beetle is too well known to require any comment, but its presence in cork, which is so largely used as a lining material for the drawers in insect cabinets, suggests the propriety of thoroughly poisoning all cork before it is used as the lining of cabinets. In doing this I have found that the best medium is carbon bisulphide, and I have made it a rule in recent years, when I have any cabinet drawers constructed, to have the cork, before it is placed in position, immersed for a time in carbon bisulphide, after which the sheets are allowed to remain in the open air until the fluid has evaporated. This method of destroying not only *Dermestes*, but specimens of *Anobium* and other cork-infesting beetles is far preferable to the method which has been sometimes recommended of painting the cork or saturating it with an alcoholic solution of corrosive sublimate. The effect of corrosive sublimate upon the pins is not good, and in the second place it is a dangerous substance to use, inasmuch as the cork in all properly constructed drawers after it has been glued to the bottoms should be sand-papered by machinery, in doing which clouds of fine dust are raised, some of which inevitably enters the nostrils and lung passages of the workmen and is liable to produce irritation. In fact, one builder positively refused to construct a cabinet for me some years ago using cork which had been steeped in a saturated solution of corrosive sublimate.

ANOTHER EUCHROMIID TO BE ADDED TO OUR LIST.

By HARRISON G. DYAR.

Another Cuban moth has occurred in southern Florida. It is *Syntomeida minima* Grote, and is represented by a pair in Dr. Ottolengui's collection, captured *in coitu* at Miami, Fla., on March 12, 1895.

The specimens are somewhat larger than Mr. Grote's original example, expanding 29 mm. in the male, 26 mm. in the female. There is an additional white spot on the primaries below the median vein at basal third of cell, narrow, elongate. In the female the basal white spot on secondaries is wanting, and the white abdominal dots vary in the two examples, the male having two, the female four on each side above. These variations do not warrant a varietal name, as the white spots are variable in the other species of the genus.

In his original description in 1867, Mr. Grote remarks that in the then state of the subject, this species could be put in the genus *Hippola* of Walker. *Hippola* is now made a synonym of *Syntomeida* by Kirby; but Mr. Grote's remarks remain as true to-day as when first written nearly thirty years ago, for they imply the unsatisfactory condition of the genera of the Euchromiidæ, which still need revision.

S. minima agrees structurally with our other species of *Syntomeida*, except that the hind legs are long and tufted as in *Phyllæcia*. The type of *Phyllæcia* is, however, not known to me (*P. punctata* Guer.), nor that of *Callicarus* (*C. pennipes* Grt.) placed in the synonymy by Mr. Kirby. Our *P. texanus* agrees with *S. minima* in the tufted legs, but differs in the presence of an accessory cell, which, however, I find is not constant. Still *minima* may remain in *Syntomeida* at present, I think, as its pattern of maculation corresponds, and it falls there in the synopsis of genera (see Journ. N. Y. Ent. Soc., i, 100, 1893).

The following synopsis will separate our species of the genus:

Abdomen banded with fulvous and black . . . . . **ipomœæ.**
Abdomen not banded.
  Abdomen with a red tip; expanse 45 mm. . . . . **opilais.**
  Abdomen without red tip; expanse 29 mm. or less . . . . **minima.**

A Review of T. L. Casey's Reasons for Striking Certain Species of Coleoptera from the American-Asiatico-European Catalogue.

By JOHN HAMILTON, M.D.

Conurus (*Conosoma*) **pubescens** Payk. was placed as one of the species common to the two hemispheres in the first edition of the catalogue of the Coleoptera common to these regions on the authority of investigations made by Dr. Horn and others, and on the authority of comparisons made by myself with several Swedish examples. There seemed no difference whatever, except a little tendency in the Swedish to color variation. Mr. A. Fauvel published a French edition inserting *pubescens* and extending its American distribution. Now comes T. L. Casey, in Coleopterological Notices No. vi, recently published, with the announcement that *pubescens* is not American. This is done on the strength of a comparison with what he says are well authenticated European types. From what is said of these types they probably belong to an extreme variety known in Europe as *crpticola*, which is in my collection, and which is so different in aspect from *pubescens* as to be readily convertible into a new species by any one on the lookout for such opportunities. The weight of the evidence is not favorable to Mr. Casey's view.

Anthicus basillaris Say.—Mr. Casey, in the work cited, unites this with *floralis* Linn. placed in his new genus *Hemantus*. I fell into the same error in the first edition of the catalogue referred to, as it was considered at that time to be the ♀ of *floralis*. In the French edition Mr. A. Fauvel rectified the error and added *basillaris* to the list of common species, uniting with it *quisquilius* Thoms. Since that time a new European catalogue has made its appearance in which an older name, *formicarius* Goeze, has been resurrected with which *quisquilius* has been united, consequently carrying with it *basillaris*. The species now stands in the Catalogue: *A. formicarius* Goeze, *basillaris* Say.

Any one conversant with Say's mode of describing will see at once on turning to his description of *basillaris* that he had not before him examples of *floralis*, as it is highly improbable he would have omitted so prominent a character as the two tubercles on the apex of the thorax. Those not caring to adopt Mr. Casey's genera will now find two species in *Anthicus*, each with

the name *formicarius*, and as Laferté's species is the more recent it may be known by the name *myrmecoides*.

Some of Mr. Casey's remarks under *floralis* seem a little nephelic. He states that the American form is the true *floralis* of Linné, "but quite possible that it [the American form] may be different from the *Anthicus floralis* of European authors." If he means that he has not seen the European *floralis*, which seems the more obvious interpretation, he may rest assured that they are identical, as I have made the comparison more than once.

Lepyrus colon Linn. = **palustris** Scop. (an older name). In the Notices cited, Mr. Casey strikes this species from the American list for scarcely any other reason, if he is rightly understood, than that he has never seen an American example. This will scarcely be accepted as a scientific procedure, and that Mr. Casey should have resorted to this method of getting rid of an Europeo-American species is only to be understood in connection with his often expressed unwillingness to admit the identity of European and eastern American forms not imported.

Lepyrus colon was considered by Mr. Kirby, Schoenherr and others, as well as Dr. LeConte, to be common to the two hemispheres, and it can scarcely be doubted that they all saw examples from both countries and knew what they did see; yet Mr. Casey consigns into synonymy with a single sweep of the pen all their determinations, for the reason that he had not seen an American example, therefore they had not. Mr. Casey does not verify his assertion by any examination of a type; some of Kirby's are probably extant yet in the British Museum, while some of Dr. LeConte's as determined for the Canadian Explorations and Surveys, are deposited according to Mr. Harrington, in the Museum of the Natural History Society of Montreal. Mr. Casey's "hypothesis," as he styles his reasons for uniting the *colon* of the above mentioned authors with *geminatus* Say, cannot be accepted.

INSECTS AND FLOWERS are more or less closely connected in the study of Nature, and especially is this true with those interested in Hymenoptera and Lepidoptera; we therefore feel sure that *Success with Flowers*—an excellent monthly magazine, published by the Dingee & Conard Co., West Grove, Pa., at only 25 cents a year,—cannot fail to interest and profit all lovers of flowers. They have also issued a handsomely illustrated *Guide to Rose Culture*, containing a complete collection of all flowers worth growing, a copy of which will be sent free to intending purchasers upon request. See their advertisement in *this* number, and don't forget to mention ENTOMOLOGICAL NEWS when you send for a copy of their publications.

A List of Lepidoptera taken at Oneonta, N. Y., 1894.

By G. F. CLEVELAND, Oneonta, N. Y.

These species were all taken by myself within a radius of three miles of my home, with exception of one or two, which are specified in the list.

Danais archippus, common, September.

Argynnis aphrodite, common, July.

" *cybele*, common, July.

" " aberration, one specimen (dark markings on underside of primaries run together and are nearly black).

Argynnis myrina, *A. bellona* (not common this year (1894), but very plentiful in 1893).

Euptoieta claudia, a few specimens observed in October.

Phyciodes tharos, common during Summer.

" *nycteis*, common during July.

Melitæa phæton, local, but plenty where found: June to July.

Grapta progne, not as common this year as in 1893.

" " var. *L. argentium*, rare, July.

" *comma*, common whole season (March to October).

" " var. *dryas*, common, July.

" *interrogationis*, rare this season.

" " var. *umbrosa*, five specimens.

" " var. *fabricii*, many poor specimens.

" *faunus*, three specimens, July; taken at Sidney, N. Y.

" *harrisii*, quite plentiful during September.

Vanessa antiopa, very common whole Summer and Autumn.

" *milbertii*, very common August and September.

Pyrameis huntera, common on blue daisy, September.

" *atalanta*, common at sugar, September.

Limenitis arthemis, local, but common where found; June 28 to July 15).

Limenitis disippus, very common.

Satyrus alope, common on elevated pasture lands.

Neonympha canthus, rather scarce this season, but plentiful in 1893 in grass swamp on top of hill.

Neonympha eurytris, common in woods, June 26 to July 30.

Chrysophanus americana, *C. thæ*, common.

Lycæna pseudargiolus, common during April.

Thecla titus and *edwardsii*, very local and rare found only in one locality on flowers of milk-weed.

Colias philodice, common as usual.
" " var. *alba*, common on blue daisy, Sept. 1 to 20.
Pieris rapæ, common.
" *oleracea*, only three specimens taken.
Papilio troilus, only one specimen taken.
" *asterias*, only two seen but not taken.
" *turnus;* only five or six seen this year, but in 1893 they were quite plentiful, and in 1892 they could be counted by hundreds flying about Syringa bushes.
Pamphila peckius, *P. napa*, *P. manataaqua*, *P. zabulon*, common.
Eudamus tityrus, common, July.
" *bathyllus*, common.

HETEROCERA.

Hemaris diffinis, three specimens.
Amphion nessus, one taken June 7, 1894.
Deilephila lineata, *D. chamænerii*, rare this year, but quite common in 1893.
Darapsa chœrilus, quite common.
Smerinthus modesta, fifteen specimens; June 25 to July 10.
" *geminatus*, not as plentiful as in 1893.
" *ophthalmicus*, five specimens; June 29 to July 20.
Paonias myops, rare this year, but plentiful in 1893.
" *excæcatus*, rare.
" " dark variety ♂ fairly common.
Cressonia juglandis, one specimen, ♀.
Sphinx kalmiæ, common.
" *gordius*, very rare this year, but plentiful in 1893.
" *drupiferarum*, fairly common.
" *chersis*, one specimen observed, but it escaped; I think there have been only three ever taken here.
Ellema harrisii, more common than usual.
Daremma undulosa, very common.
Ceratomia amyntor, rare.
Prionoxystus robiniæ, three specimens.
" ——, one specimen.
" ——, one specimen.
Alypia octomaculata, very common.
Mamestra bella, only two or three battered specimens.
Ctenucha virginica, common.

Callimorpha militaris, one specimen.
Eudryas unio, rare this year, common in 1893.
" *grata*, common.
Ecpantheria scribonia, several specimens.
Arctia virgo, common.
" *arge* and varieties very common.
Phragmatobia rubricosa, three specimens.
Hyphantria cunea, *Spilosoma virginica*, *Leucarctia acræa*, *Euchætes collaris*, common.
Euchætes egle, rare.
Pyrrharctia isabella, *Halisidota tesselata*, *H. caryæ*, *H. maculata*, common.
Tolype velleda, one specimen.
Clisiocampa americana, common.
Cerura borealis, rare.
Nadata gibbosa, *Datana mimestra*, common.
Datana rubicunda, common.
Anisota senatoria, rare.
Hyperchiria io, *Actias luna*, *Telea polyphemus*, common.
Attacus promethea, cocoons plentiful in February, 1894, but I have never taken but one specimen at light.
Platysamia cecropia, very common.

I have not, until this Winter, been interested in the Noctuidæ, and have not identified much of what I took, but I made a small collection of Catocalæ which I have named:

Catocala nubilis, rare, May.
" *puritanis*, rare, July.
" *habilis*?, rare, September.
" *cara*, common, September.
" *ilia*, rare, September.
" *concumbens*, common, September.
" *portia*, common, September.
" *neogama*, common, September.
" *desperata*, rare, September (Sidney, N. Y.).
" *briseis*, quite common.
" *relicta*, rare.
" *ultronia*, quite common.
" *antinympha*, common.
Plusia simplex, *P. contexta*, common.

THE "DEATH-WATCH" BEETLE.

The common name of Death-watch, given to *Xestobium tesselatum*, sufficiently announces the popular prejudice against this insect; and so great is this prejudice, that, as says an editor of Cuvier's works, the fate of many a nervous and superstitious patient has been accelerated by listening, in the silence and solitude of night, to this imagined knell of his approaching dissolution. The learned Sir Thomas Browne considered the superstition connected with the Death-watch of great importance, and remarks that "the man who could eradicate this error from the minds of the people would save from many a cold sweat the meticulous heads of nurses and grandmothers," for such persons are firm in the belief that the solemn Death-watch clicks the hour of death.

The witty Dean of St. Patrick endeavored to perform this useful task by means of ridicule. And his description, suggested, it would appear, by the old song of "A cobbler there was, and he lived in a stall," runs thus:

—— A wood worm
That lies in old wood, like a hare in her form,
With teeth or with claws, it will bite, it will scratch;
And chambermaids christen this worm a Death-watch,
Because, like a watch, it always cries click.
Then woe be to those in the house that are sick!
For, sure as a gun, they will give up the ghost,
If the maggot cries click when it scratches the post.
But a kettle of scalding hot water injected,
Infallibly cures the timber affected;
The omen is broken, the danger is over,
The maggot will die, and the sick will recover.

Grose, in his "Antiquities," thus expresses this superstition: "The clicking of a Death-watch is an omen of the death of some one in the house wherein it is heard." Watts says: "We learn to presage approaching death in a family by ravens and little worms, which we therefore call a Death-watch." Gray, in one of his Pastorals, thus alludes to it:

When Blonzelind expired, ...
The solemn Death-watch click'd the hour she died.

"It will take," says Mrs. Taylor, a writer in "Harper's New Monthly Magazine" (vol. xxiii, 775.) "a force unknown at the present time to physiological science to eradicate the feeling of

terror and apprehension felt by almost every one on hearing this small insect." She herself, an entomologist, confesses to have been very much annoyed at times by coming in contact with this "strange nuisance," but she was cured by an over application. "I went to pay a visit," says she, "to a friend in the country. The first night I fancied I should have gone mad before morning. The walls of the bed-room were papered, and from them beat, as it were, a thousand watches—tick, tick, tick! Turn which way I would, cover my head under the bed-clothes to suffocation, every pulse in my body had an answering tick, tick, tick! But at last the welcome morning dawned, and early I was down in the library; even here every book, on shelf above shelf, was riotous with tick, tick, tick! At the breakfast-table, beneath the plates, cups and dishes, beat the hateful sound. In the parlor, the withdrawing room, the kitchen, nothing but tick, tick! The house was a huge clock, with thousands of pendulums ticking from morning to night. I was careful not to allow my great discomfort to annoy others. I argued, what they could tolerate surely I could; and in a few days habit had rendered the fearful, dreaded ticking a positive necessity."

Baxter, in his "World of Spirits," p. 203, most sensibly observes, that "there are many things that ignorance causeth multitudes to take for prodigies. I have had many discreet friends that have been affrighted with the noise called a Death-watch, whereas I have since, near three years ago, oft found by trial that it is a noise made upon paper by a little, nimble, running worm, just like a louse, but whiter and quicker; and it is most usually behind a paper pasted to a wall, especially to wainscot; and it is rarely, if ever, heard but in the heat of Summer."

In the "British Apollo," 1710, ii, No. 86, is the following query: "Why Death-watches, crickets and weasels do come more common against death than at any other time? *Ans.*—We look upon all such things as idle superstitions, for were anything in them, bakers, brewers, inhabitants of old houses, etc., were in a melancholy condition." To an inquiry (ibid. vol. ii, No. 70) concerning a Death-watch, whether you suppose it to be *a living creature*, answer is given: "It is nothing but a little worm in the wood."

"How many people have I seen in the most terrible palpitations, for months together, expecting every hour the approach

of some calamity, only by a little worm, which breeds in old wainscot, and, endeavoring to eat its way out, makes a noise like the movement of a watch !" (Secret Memoirs of the late Duncan Campbell, 1732, p. 61).

Authors were formerly not agreed concerning the insect from which this sound of terror proceeded, some attributing it to a kind of wood-louse, others to a spider.

The "Death watch" commences its clicking, which is nothing more than the call or signal by which the male and female are led to each other, chiefly when Spring is far advanced. The sound is thus produced: Raising itself upon its hind legs, with the body somewhat inclined, it beats its head with a great force and agility upon the plane of position. The prevailing number of distinct strokes which it beats in succession is from seven to nine or eleven; which circumstance, thinks Mr. Shaw (*Zool.* vi, 34), may perhaps still add, in some degree, to the ominous character which it bears. These strokes follow each other quickly, and are repeated at uncertain intervals. In old houses, where these insects abound, they may be heard in warm weather during the whole day.—*Cowan's Curious Facts.*

———o———

SUPERSTITIONS ABOUT "LADY-BIRDS."

(COCCINELLIDÆ.)

The Lady-bird (*Coccinella septempunctata*) in Scandinavia was dedicated to the Virgin Mary, and is there, to this day, called *Nyckelpiga*—Our Lady's Key-maid, and (in Sweden, more particularly) *Jung-fru Marias Gullhona*—the Virgin Mary's Golden-hen. A like reverence was paid to this beautiful insect in other countries; in Germany they have been called *Frauen* or *Marien-kafer*—Lady-beetles of the Virgin Mary; and in France are now known by the names of *Vaches de Dieu*—Cows of the Lord, and *Betes de la Vierge*—Animals of the Virgin. The names we know them by, *Lady-bird*, *Lady-bug*, *Lady-fly*, *Lady-cow*, *Lady-clock*, *Lady-couch* (a Scottish name), etc., have reference also to this same dedication, or, at least, respect.

The Lady-bird in Europe, and particularly in Germany, where it probably is the greatest favorite, and whence most of the superstitions connected with it are supposed to have originated, is

always connected with fine weather. At Vienna the children throw it into air, crying,—

Little birdie, birdie,
Fly to Marybrunn,
And bring us a fine sun.

Marybrunn being a place about twelve English miles from the Austrian capital, with a miracle-working image of the Virgin (still connected with the Virgin), who often sends good weather to the merry Viennese (Chambers' *Pop. Rhymes*, 1841, p. 170).

And, from the marsh of the Elbe, to this little insect the following words are addressed :

May-cat,
Fly away,
Hasten away,
Bring me good weather with you to-morrow.

In England, the children are wont to be afraid of injuring the Lady-bird lest it should rain.

With the Northmen, the Lady-bird—Our Lady's Key-maid—is believed to foretell to the husbandman whether the year shall be a plentiful one or the contrary; if its spots exceed seven, bread-corn will be dear ; if they are fewer than seven, there will be an abundant harvest and low prices. And, in the following rhyme from Pleon, this insect is invoked to bring food :

Marspäert, fly to heaven !
Bring me a sack full of biscuit, one for me, one for thee,
For all the little angels one.

In the north of Europe it is thought lucky when a young girl in the country sees the Lady-bird in the Spring; she then lets it creep about her hand, and says: "She measures me for wedding gloves." And when it spreads its little wings and flies away, she is particular to notice the direction it takes, for thence her sweetheart shall one day come. The latter part of this notion obtains in England ; and it has been embodied by Gay in one of his Pastorals as follows :

This Lady-fly I take from off the grass,
Whose spotted back might scarlet-red surpass,
Fly, Lady-bird, north, south, or east or west,
Fly where the man is found that loves me best.
He leaves my hand, see, to the west he's flown,
To call my true-love from the faithless town.

In Norfolk, too, where this insect is called the Bishop Barnabee, the young girls have the following rhyme, which they continue to recite to it placed upon the palm of the hand, till it takes wing and flies away :

Bishop, Bishop Barnabee,
Tell me when my wedding be;
If it be to-morrow day,
Take your wings and fly away!
Fly to the east, fly to the west,
Fly to him that I love best.

Why the Lady-bird is called Bishop Barnabee, or Burnabee, there is great difference of opinion. Some take it to be from St. Barnabas, where festival falls in the month of June, when this insect first appears; and others deem it but a corruption of the Bishop-that-burneth, in allusion to its fiery color.

So also in Scotland, the Lady-bird, which is still a great favorite with the Scottish peasantry, has been used for divining one's future helpmate, as appears from a rhyme from the north of Scotland, which dignifies the insect with the title of Dr. Ellison :

Doctor, Dr. Ellison, where will I be married?
East, or west, or south, or north?
Take ye flight and fly away.

It is sometimes also termed Lady Ellison, or knighted Sir Ellison; while other Scottish names of it are Mearns, Aberd, The King, and King Galowa, or Calowa. Under this last title of dignity there is another Scottish rhyme, which evinces also the general use of this insect for the purpose of divination :

King, King Calowa,
Up your wings and flee awa'
Over land and over sea;
Tell me where my love can be.

There is a Netherlandish tradition that to see Lady-birds forebodes good luck; and in England it is held extremely unlucky to destroy these insects. Persons killing them, it is thought, will infallibly, within the course of the year, break a bone, or meet with some other dreadful misfortune.

In England the children are accustomed to throw the Lady-bird into the air, singing at the same time :

Lady-bird, lady-bird, fly away home;
Your house is on fire, your childrens at home,
All but one that digs under the stone,—
Ply thee home, lady-bird, ere it be gone.

Or, as in Yorkshire and Lancashire,—

> Lady-bird, lady-bird, eigh thy way home;
> Thy house is on fire, thy children all roam,
> Except little Nan, who sits in her pan,
> Weaving gold laces as fast as she can.

Or, as most commonly with us in America,—

> Lady-bird, lady-bird, fly away home,
> Your house is on fire, and your children all burn.

The meaning of this familiar, though very curious couplet, seems to be this: the larvæ, or young, of the Lady-bird feed principally upon the Aphides, or plant-lice, of the vines of the hop; and fire is the usual means employed in destroying the Aphides; so that in killing the latter, the former, which had come for the same purpose, are likewise destroyed.—*Cowan's Curious Facts.*

I RECEIVED the February number of the NEWS last evening and noticed the article on the Red Bug by Mrs. A. T. Slosson, and also the article in the previous number by Dr. Hamilton.

Thinking that you might not take a quotation on the subject amiss, I will enclose one from White's "Natural History of Selborne," which I happen to be reading.

From White's letter to Thomas Pennant dated March 30, 1771: "There is an insect with us, especially on chalky districts, which is very troublesome and teasing all the latter end of the summer, getting into people's skins, especially those of women and children, and raising tumours which itch intolerably.

"This animal (which we call harvest bug) is very minute, scarce discernible to the naked eye; of a bright scarlet color, and of the genus of Acarus.*

"They are to be met with in garden on kidney beans, or any legumens, but prevail only in the hot months of summer.

"Warreners, as some have assured me, are much infested by them on chalky-downs, where these insects sometimes swarm to so infinite a degree as to discolour their nets, and to give them a reddish cast, while the men are so bitten as to be thrown into fevers."—I. FOSTER MOORE, JR., Bridgeport, Conn.

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* "Leptus autumnalis of Latreille."

ENTOMOLOGICAL NEWS.

Published monthly (except July and August), in charge of the joint publication committees of the Entomological Section of the Academy of Natural Sciences, of Philadelphia, and the American Entomological Society. It will contain not less than 300 pages per annum. It will maintain no free list whatever, but will leave no measure untried to make it a necessity to every student of insect life, so that its very moderate annual subscription may be considered well spent.

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PHILADELPHIA, PA., MARCH, 1896.

The New Quarters of the Society and Section.

THE American Entomological Society and the Entomological Section of The Academy of Natural Sciences of Philadelphia, have moved into new and commodious quarters in the Academy. For a number of years past we have been badly in need of space, both for the collections and library. The new rooms are large and well lighted, so that students can have ample facilities for work. The collections can be put in better order, and there is room to spread and grow. The extent and value of the collections are too well known to be detailed at this time and place, and we can only say that we are prepared to receive collections by gift or bequest, and that they will be properly cared for in a fire-proof building. The history of the American Entomological Society is largely the history of Entomology in the United States, and we intend to continue up to the standard. We began in Pennsylvania with men like Say, Melsheimer and Haldeman, and the State and the Society were later known the world over through the efforts of LeConte, Horn and Cresson. The future is promising, and the Society and the Entomological Section of the Academy will continue to be foremost as in the past. Later on we hope to give the readers of the NEWS an account of our collections, especially recent additions, and the work we are doing and plans for the furtherance of entomological interests.

DEPARTMENT OF EGONOMIC ENTOMOLOGY.

Edited by Prof. JOHN B. SMITH, Sc.D., New Brunswick, N. J.

Papers for this department are solicited. They should be sent to the editor, Prof. John B. Smith, Sc.D., New Brunswick, N. J.

The Grape Root-Worm.—Under this title Mr. Webster has published in Bulletin No. 62, of the Ohio Experiment Station, an interesting experience with *Fidia viticida* Walsh. This recalls, strikingly, my own experience in the New Jersey vineyards when the "Rose-chafer" was the enemy whose destruction was sought; and after reading over Mr. Webster's Bulletin I think I can understand his feeling of helpless anger and disgust at having accomplished so little after so many trials. Briefly stated, the adult beetle lays its eggs under any convenient shelter on the vine, in little clumps or masses varying in number. The larvæ hatch, drop to the ground and make their way as best they can to the roots upon which they feed. They live underground throughout the Winter and emerge as adults the following June, when they feed upon the foliage of the grape. The injury is done by the larvæ feeding upon the roots and more or less impairing the vitality of the vine in that way. The interesting feature of Mr. Webster's experience is the fact that the arsenites acted so slowly and unsatisfactorily upon the beetles, and we are brought face to face here again with a very important fact in Economic Entomology which should prevent us from positively predicting the action of given insecticides in new cases. There seems to be no doubt now that arsenic acts very slowly indeed upon some insects, and that certain species are able to dispose of a comparatively enormous quantity without apparent trouble. Prof. Fernald has given his experiences with the Gypsy moth caterpillars: My own experience with "Rose-chafer" corroborates him as to the difficulty in destroying by means of arsenic this particular species, while Mr. Webster seems to have found something very similar with this grape root-worm, or rather with its parent beetle. Comparatively few experiments seem to have been made to prevent the beetle from getting into the ground by the use of repellant substances. Lime was used in one experiment; but it must not be forgotten where lime is used, that after a day or two it might just as well be so much dust of another character for all the insecticide effect that it will have. Lime is an insecticide only when it acts as a caustic, or it does only what any other extremely fine powder would do under similar circumstances. There would have been a good deal more chance of success if ground tobacco had been used, although even this lasts, effectually, only a short time. Here, however, there would have been this advantage: a watery extract of tobacco formed by rains, would prove of insecticide value if it came into contact with the larvæ upon the roots. Bisulphide of carbon was used with only very moderate success, and Mr. Webster calls attention to a fact that has not been mentioned, so

far as I am aware, in connection with recommendations made for using this material; that is, that the soil must be neither too wet nor too dry. In either case the action will be unsatisfactory, and possibly this may account for some failures of which I have learned in an endeavor to use this material for other purposes. We are constantly discovering new and important factors that must be reckoned with if we want to obtain uniform results in the use of any insecticide. Mr. Webster finally makes as his most practical recommendation the suggestion that during the season of egg-laying and the hatching of the young larvæ the ground beneath the vines be kept constantly stirred and turned up towards the rows, so that roots and stem may be as deeply covered as possible by an unbroken surface making it necessary for the larvæ to dig down rather than crawl through some crevice to reach the roots. Any method of cultivation that induces the plant to send its roots down deeply is to be preferred to one which keeps the roots near to the surface. This particular insect has been known for a very long time, and not until the last year or two has it made its appearance in destructive numbers. It is quite likely that in the course of another short period it will disappear as abruptly as it became an injurious pest.

Cut-Worms.—During the season of 1895 worms seem to have been unusually abundant in many localities, and Bulletins on the subject were issued in New Jersey, Kentucky and New York. These same insects have been referred to more or less incidentally in other Station publications, and in the discussions before the various society meetings; and practically much the same species have proved troublesome in all the States. It is a matter of interest that difference in surroundings influence the habits of the insects, and that almost all species will climb trees and eat buds when they fail in obtaining a sufficient supply of low vegetation. In young orchards "climbing cut-worms" can do an enormous amount of irreparable damage, while even on larger trees they may affect the crop of fruit. In the New York Bulletin these "climbing cut-worms" of the orchard are especially treated, and considerable reference is made to experiences in Michigan, in dealing with similar insects. It seems tolerably easy to prevent the insects from climbing the trunks by means of a band of cotton batting several inches wide, tied at the bottom and then turned down so as to form a sort of cone. This appears to be absolutely unsurmountable for the cut-worms, and the trees can be protected from them without much trouble or expense; but they seem also inclined to chew the bark of the young trees at the surface and girdle them, causing even more damage than if they had been allowed to ascend and feast upon the buds. In such cases it seems to me that the "Raupenleim," or "Dendrolene," would serve a very much better purpose. A band of this material extending from the surface, or even a little below it, for eight, ten, or twelve inches up to the trunk, would be unsurmountable by cut-worms, unless they were numerous enough to cover the material so completely as to form a bridge for those coming after. In such a case a

cotton band on top of the "Dendrolene" would serve as a complete protection. There are two other ways of avoiding injury to trees: one is by sowing crimson clover in the orchards believed to be infested, which early in the Spring will furnish an abundance of food for the cut-worms and render them disinclined to crawl up the trunks for feeding purposes; the other is a ring of poisoned bran placed around every tree, which will be fed upon before the insects undertake to climb; and the quantity to be applied must depend somewhat upon the number of cut-worms supposed to be in the orchard. Probably a combination of the "Dendrolene" band extending to the surface of the ground, and a ring of poison bran would be the most satisfactory, providing for a mechanical protection to the trees in the first place, and for the destruction of the caterpillars in the second. Mr. Davis claims that it is not necessary to sweeten the bran mixture in order to render it attractive to the larvæ, and he is probably correct; but the addition of sugar keeps the mixture moist for a somewhat longer time and renders it a little more adhesive, so that it does not so readily drop apart when it dries out a little. Prepared with sugar-water the poisoned bran ought to remain effective for at least three nights, except where exposed uncovered directly to the sun, in which case it will last only during the one night and will dry during the following day so as to lose its attractiveness to the insects.

Economic Entomology.—I have on more than one occasion called attention in this Department and elsewhere, to the danger lurking in the ever-increasing search for new varieties of fruits to be grown in the United States. Fruit trees are everywhere subject to insect enemies, and it is an easy matter to introduce these with the plants themselves. The matter has been discussed in the Association of Economic Entomologists, and while the importance of a concerted effort to keep out foreign pests was freely admitted, it was just as universally felt that we could not hope to get at present any satisfactory supervision over imports where ports of entry are as numerous as in our country. Prof. Cockerell, the energetic entomologist of the New Mexcio Station, refuses to be discouraged by the apparent difficulties in the way, and has prepared the thin end of the wedge—which is explained in the following:

Copy of resolutions concerning the Introduction of Injurious Insects from the South, drawn up by the Entomologist of the N. M. Agricultural Experiment Station and adopted by the council of said Station Jan. 9, 1896.

Resolved, (1) That great injury has already been done to the Agricultural and Horticultural interests of the Southern States by the introduction of injurious insects, as witness the various scale-insects on Citrus trees in Florida and Louisiana and cotton-weevil in Texas.

(2) That it is well known through recent investigations in the West Indies and Central America, that numerous scale insects and other pests exist in the countries to the south of us, but have not yet reached the U. S. Thus for example, the *Aspidiotus scutiformis* on Citrus trees in

Mexico, the *A. articulatus* on Citrus trees and many other plants in the West Indies, the *A. personatus* on numerous plants in the West Indies, etc.

(3) That past experience shows that these Mexican and West Indian species are likely to be introduced in the United States, if no precautionary measures are taken; and that some of them, at least, may be found to flourish over a considerable portion of N. A. Witness, for example, the West Indian *Diaspis amygdali* now injuring peach trees as far north as the city of Washington.

(4) That the results obtained by the horticultural quarantine officer of California show that it is possible to prevent by due vigilance, the introduction of numerous insect pests. Thus Mr. Craw has quite lately found on plants which were about to be landed at San Francisco a number of species of scale insects foreign to this country, several of them undoubtedly quite pernicious.

(5) That when the immense interests at stake are considered, the sum of money required to support a system of inspection and quarantine along the southern border of the United States appears quite insignificant. If but one serious pest were kept out of the country in a year, the saving would more than equal the cost.

(6) That there should accordingly be appointed horticultural quarantine officers at Nogales, El Paso, Eagle Pass, Laredo, Galveston, New Orleans, Mobile and Key West.

(7) That these officers should be empowered by the laws of their respective States and Territories to examine all plants introduced through their several localities, and destroy all found to be infested by insects.

(8) That when the quarantine officers have examined and passed a plant or collection of plants, they should issue a certificate to that effect to the importers, and that it should be made illegal to possess imported plants without such certificate.

(9) That the quarantine officers should be appointed by the Agricultural Experiment Stations of their several States and Territories and paid out of the funds of said States and Territories the necessary amount being appropriated to the Agric. Experiment Station for that purpose.

(10) That while much good could be accomplished as above, it is also very necessary to learn what injurious insects exist in all the regions to the south of us, so as to be warned of their probable advent in this country; and also to ascertain their natural distribution and life-histories, parasites, etc., so as to be prepared to meet them intelligently.

(11) That while observing with much satisfaction the recent temporary appointment of an agent by the Department of Agriculture to travel in Mexico and determine such points as the above, and freely acknowledging the importance of the results thus obtained, we cannot regard this as more than a beginning of an investigation which should at least occupy many years. Thus for example, we are still ignorant of the injurious insects inhabiting the whole west coast of Mexico south of Guaymas, of

Yucatan, Guatemala, Honduras, Nicaragua, Costa Rica, etc., while at no locality did the agent of the Department remain long enough to obtain more than a very superficial knowledge of the insects there existing.

(12) That we therefore recommend the appointment of a permanent agent who must be a skilled Entomologist, well informed about scale insects, to travel in Mexico, Central America and the West Indies, and make collections of injurious insects and such observation as are above indicated.

(13) That such agent should be appointed and paid by the Department of Agriculture, and be regarded as an official of the Division of Entomology, to which he should report and transmit all his collections, the latter to be finally deposited in the United States National Museum.

(14) That while thus in the service of the Department of Agriculture he should be instructed to cooperate with the several Agricultural Experiment Stations, and advise the quarantine officers concerning their work, in the light of the experience gained by his researches.

Notes and News.

ENTOMOLOGICAL GLEANINGS FROM ALL QUARTERS OF THE GLOBE.

[The Conductors of ENTOMOLOGICAL NEWS solicit, and will thankfully receive items of news, likely to interest its readers, from any source. The author's name will be given in each case for the information of cataloguers and bibliographers.]

To Contributors.—All contributions will be considered and passed upon at our earliest convenience, and as far as may be, will be published according to date of reception. ENTOMOLOGICAL NEWS has reached a circulation, both in numbers and circumference, as to make it necessary to put "copy" into the hands of the printer, for each number, three weeks before date of issue. This should be remembered in sending special or important matter for certain issue. Twenty-five "extras" without change in form will be given free when they are wanted, and this should be so stated on the MS. along with the number desired. The receipt of all papers will be acknowledged.—ED.

DURING July of 1895, I took on flowers of Swamp Milkweed, *Asclepias carnosa*, and Pasture Thistle, two fine *Hemaris thysbe*, var. *uniformis*, in two localities of Westchester County, N. Y. I also received from a collector in Manitoba, three specimens of the same variation, which seems to be the prevailing form in that northern region.—Dr. R. E. KUNZE.

ENTOMOLOGICAL NEWS received. I am very much pleased with the volume for 1895. I have taken several entomological journals, but never saw one so handsome in its make up or more useful to students in the field. The NEWS aims high and invites its readers, who are in the amateur field, to come up higher. I find it constantly helpful, and if there is anything in my line I do not understand I take pleasure in studying it out.—A. W. P.

INSECTS INJURIOUS TO EVERGREENS.—The spruces in some parts of the United States are attacked by a gall-forming insect belonging to the

coccid genus *Adelges Vallot.* On the grounds of the Massachusetts Agricultural College it has become quite abundant doing serious damage. We are making studies on this insect and hope to be able to publish a complete account of it before long. There seems to be some doubt whether we have more than one species in this country. Some specimens do not agree with Thomas' *Adelges abieticolens*, which he described from Illinois. If the insect occurs in your locality, will you kindly send me some of the gall infested twigs? At this season of the year only dead galls can be found, and they are dry and shrunken, with numerous open cells. Even these dry galls wills prove useful.—C. H. FERNALD, Amherst, Mass.

A CURIOUS ABERRATION OF *Melitæa phæton*.—Expands 54 mm.; colors as in *phæton*, but markings arranged as follows:

Primaries: red spots normal; the two outer rows of white fused together into a band which is cut by the veins into a row of dashes; the two inner rows similar, but faint and extending from the costa about one-third across the wing. Secondaries: red spots heavy, a reddish dash along costa; white represented by a single faint spot near the anal angle. Underside, primaries: all the white fused into a broad band, well defined and serrate on the outer edge; clouded on the inner edge; red spots normal. Secondaries: red spots heavy, those near the base of wing form a large blotch with no white intermingled; the white forms a clouded band with a blackish spot between each black vein and not reaching costal margin. One specimen taken in Webster, N. H., June 12, 1895, in a bog where *phæton* had never been observed before, and where most diligent search failed to discover more.—W. F. FISKE, Mast Yard, N. H.

ABOUT THE CHIGOE.—To the Pulicidæ belongs also a native of the West Indies and South America, the *Pulex penetrans*, variously named in the countries where it is found, Chigoe, Jigger, Nigua, Tungua and Pique. According to Stedman this "is a kind of a small sand flea, which gets in between the skin and the flesh without being felt, and generally under the nails of the toes, where, while it feeds, it keeps growing, till it becomes of the size of a pea, causing no further pain than a disagreeable itching. In process of time its operation appears in the form of a small bladder, in which are deposited thousands of eggs, or nits, and which, if it breaks, produce so many young Chigoes, which, in course of time, create running ulcers, often of very dangerous consequence to the patient; so much so, indeed, that I know a soldier the soles of whose feet were obliged to be cut away before he could recover; and some men have lost their limbs by amputation—nay, even their lives—by having neglected in time to root out these abominable vermin. The moment, therefore, that a redness and itching more than usual are perceived, it is time to extract the Chigoe that occasions them. This is done with a sharp-pointed needle, taking care not to occasion unnecessary pain, and to prevent the Chigoe from breaking in the wound. Tobacco ashes are put into the orifice, by which in a little time the sore is perfectly healed." The female

slaves are generally employed to extract these pests, which they do with uncommon dexterity, Old Ligon tells us he had ten Chigoes taken out of his feet in a morning "by the most unfortunate Yarico," whose tragical story is now so celebrated in prose and verse. Mr. Southey says that many of the first settlers of Brazil, before they knew the remedy to extract the Chigoes, lost their feet in the most dreadful manner. Walton, in his "Present State of the Spanish Colonies," tells us of a Capuchin friar, who carried away with him a colony of Chigoes in his foot as a present to the scientific colleges in Europe; but, unfortunately for himself and for science, the length of the voyage produced mortification in his leg, that became necessary to cut it off to save the zealous missionary's life, and the leg, with its inhabitants, were tumbled together into the sea. Humboldt observes "that the whites born in the torrid zone walk barefoot with impunity in the same apartment where a European, recently landed, is exposed to the attack of this animal. The *Nigua*, therefore, distinguishes what the most delicate chemical analysis could not distinguish, the cellular membrane and blood of our European from those of a Creole white."—*Cowan's Curious Facts.*

Identification of Insects (Imagos) for Subscribers.

Specimens will be named under the following conditions: 1st, The number of species to be **limited to twenty-five** for each sending; 2d, The sender to pay all expenses of transportation and the insects to become the property of the American Entomological Society; 3d, Each specimen must have a number attached so that the identification may be announced accordingly. Exotic species named only by special arrangement with the Editor, who should be consulted before specimens are sent. Send a 2 cent stamp with all insects for return of names. Before sending insects for identification, read page 41, Vol. III. Address all packages to ENTOMOLOGICAL NEWS, Academy Natural Sciences, Logan Square, Philadelphia, Pa.

Entomological Literature.

Under the above head it is intended to note such papers received at the Academy of Natural Sciences of Philadelphia pertaining to the Entomology of the Americas (North and South). Articles irrelevant to American entomology, unless monographs, or containing descriptions of new genera, will not be noted. Contributions to the anatomy of insects, however, whether relating to American or exotic species will be recorded.

1. Old Farm Fairies. A Summer Campaign in Brownieland against King Cobweaver's Pixies. A story for young people, by Henry Christopher McCook, 8vo. Philadelphia, George W. Jacobs & Co., 1895.—This is a novel book with a novel title. As the latter indicates, it is intended for the little ones, and will go far toward planting the seeds of interest for entomology in the minds of those whose inexperience precludes an interpretation of guides and introductions. The story deals almost entirely with spiders, who, under the guise of Pixies, wage an unsuccessful war against the Brownies. Numerous battles and duels occur,

and spider architecture, illustrations of which are in plenty, is skilfully seized to illustrate the pitfalls, forts and ambuscades set up by the Pixies. The work is fully illustrated, the pictures of spider architecture being valuable from a scientific standpoint, while others more calculated to please the juvenile mind are not wanting. Old Farm Fairies is a pleasing book, quite worthy of the author of "The Tenants of an Old Farm."—F.

2. ANNALES DE LA SOCIETE ENTOMOLOGIQUE DE BELGIQUE, T. xxxix, 12.—New Hemiptera of the Section Hydrocorisæ Latr., A. L. Montandon. New Bolivian Lathridiidæ, R. P. Belon.

3. ANNALS AND MAGAZINE OF NATURAL HISTORY, No. 97.—On the Coccinellidæ of Japan, G. Lewis. Descriptions of new species of butterflies of the genus *Calasticta* in the British Museum, A. G. Butler. New genera and species of Pyralidæ, Thyrididæ and Epiplemidæ (cont.), W. Warren.

4. THE CANADIAN ENTOMOLOGIST, xxviii, 1.—William H. Edwards, C. J. S. Bethune. The "Bombyces," what are they? H. G. Dyar. Concerning *Feltia* and other matters, J. B. Smith. List of Hymenoptera taken at Sudbury, Ontario, J. D. Evans. The Mediterranean flour moth, *Ephestia kuehniella* Zeller, still in Canada, W. G. Johnson. *Aspidiotus perniciosus* Comstock, and *Aonidia fusca* Maskell. A question of identity or variation, W. M. Maskell. On *Agrotis tritici* Linn., ab. *subgothica* Haw., and *Agrotis jaculifera* Gn , J. W. Tutt. *Exomalopsis*, a neotropical genus of bees in the United States, T. D. A. Cockerell.

5. BERICHTE DER NATURFORSCHENDEN GESELLSHAFT ZU FREIBURG, i, B., ix, H. 2.—On the nerve terminations of the dermal sense organs of the Arthropoda, after treatment with the methyl-blue and chrome-silver methods, O. vom Rath.

6. ZOOLOGISCHER ANZEIGER, No. 493.—Can *Diplopoda* climb on perpendicular glass partitions?, C. Verhoeff.

7. THE GEOLOGICAL MAGAZINE, London, No. 379.—European species of *Etoblattina* . . . , S. H. Scudder.

8. BULLETIN FROM THE LABORATORIES OF NATURAL HISTORY, STATE UNIVERSITY OF IOWA, iii, No. 4 [Extract].—A list of some Coleoptera from the northern portions of New Mexico and Arizona, H. F. Wickham.

9. CORNELL UNIVERSITY AGRICULTURAL EXPERIMENT STATION (Entomological Division), Bulletin No. 107.—Wire worms and the bud moth, M. V. Slingerland. Ibid, No. 108.—The Pear Psylla and the New York Plum Scale, M. V. Slingerland.

10. Geological Survey of Canada: Contributions to Canadian Palæontology, ii, pt. 1.—Canadian fossil insects, S. H. Scudder.

11. ANNALES DE LA SOCIETE LINNEENNE DE LYON, T. xli (1894).—Nests and metamorphoses of insects, Fifth Memoir, Capt. Xambeu.

12. ACTES DE LA SOCIETE LINNEENNE DE BORDEAUX, 5e serie, T. vii.—Zoological Notes, J. Perez.

13. ENTOMOLOGISK TIDSKRIFT UTGIFVEN AF ENTOMOLOGISKA FORENINGEN I STOCKHOLM, xvi, H. 1–2.—Diagnoses of new Lepidoptera from Africa, C. Aurivillius. Contribution to the knowledge of the Capsid genus *Fulvius* Stal, O. M. Reuter. Ibid, xvi, H. 3.—Contributions to the knowledge of the insect fauna of Cameroons, ii, Rhopalocera, C. Aurivillius (continued in H. 4 of same volume).

14. ENTOMOLOGISCHE NACHRICHTEN, xxii, H. 2.—Two new Odonata captured by Mr. G. Zenker in Cameroons, F. Karsch.

15. PSYCHE, a journal of Entomology, February, 1896.—Habits and parasites of a new Californian wasp, A. Davidson. Notes on the Winter insect fauna of Vigo County, Indiana, iv, W. S. Blatchley. Final notes on *Orgyia*, H. G. Dyar. Notes on the Acrididæ of New England, ii, Tryaxilinæ ii, A. P. Morse. New species of *Papirius*, J. W. Folsom. Some new insects, T. D. A. Cockerell. A *Ceroplastes* and its parasite, ibid. Preliminary diagnoses of new Coccidæ, ibid.

16. UNITED STATES DEPARTMENT OF AGRICULTURE, DIVISION OF ENTOMOLOGY, Bulletin No. 2, new series (Proceedings of the Seventh Annual Meeting of the Association of Economic Entomologists).—Entomological notes and problems, J. B. Smith. Notes on insecticides, C. L. Marlatt. Some experiments with the knapsack kerosene attachment, H. E. Weed. A modification of the kerosene knapsack sprayer, C. M. Weed. Spraying without a pump, J. M. Aldrich. "Raupenleim" and "Dendrolene," J. B. Smith. A city entomologist and insecticides, E. B Southwick. Insects of the season in Michigan, G. C. Davis. Herbivorous habits of certain Dermestidæ, F. H. Chittenden. Some shade-tree insects of Springfield and other New England cities, L. O. Howard. The elm-leaf beetle in Washington, C. L. Marlatt. The elm-leaf beetle in Albany, J. A. Lintner. Notes on the Gypsy Moth in Massachusetts, C. H. Fernald. The striped cottonwood beetle, J. A. Lintner. On the study of forest-tree insects, A. D. Hopkins. The importation and repression of destructive insects, F. M. Webster. Insects of the year in Ohio, F. M. Webster. On the natural conditions which affect the distribution and abundance of Coccidæ, T. D. A. Cockerell. How shall we improve our collections?, C. P. Gillette.

17. ANNALES DE LA SOCIETE ENTOMOLOGIQUE DE FRANCE, 1894, pt. 1, fasc. 1.—The genus *Dysides* Pert. (*Apoleon* Gorh. in part), P. Lesne. Descriptions of new species of Lampyridæ, E. Olivier. Note on the role of the sternal spatula in the larvæ of Cecidomyans, J. J. Kieffer. On the seminal receptacle of the wasp (*Vespa germanica*), P. Marchal. Descriptions of Nocturnal Lepidoptera, P. Thierry-Mieg. Of sex in the Scydmænidæ, J. Croissandeau. Determination of the sex of Coleopterous insects of the same species, M. Martin. Note on the cave-inhabiting Arthropoda of the Transvaal, E. Simon. The copulatory male organ of

the Hymenoptera and its taxonomic value, J. Perez. Note on the large Trombidions of the warm countries, E. Trouessart. Study of the neuration of insects applied to the description of fossil paleozoic insects, C. Brongniart. On the stridulatory apparatus of *Myrmica rubra* L., C. Janet. Description of a new species of Tineid (*Trichophaga coprobiella*) from Obock (Red Sea), E. L. Ragonot. J. J. Kieffer describes three new genera of Cecidomyidæ (no title). Ibid, pt. 1, fasc. 2.—Synonymical notes on the Microlepidoptera and descriptions of little-known or unpublished species, E. L. Ragonot. Voyage de M. E. Simon in austral Africa: Haliplidæ, Dytiscidæ and Gyrinidæ, M. Regimbart. Ichneumonidæ of Europe and surrounding countries, i, G. V. Berthoumieau. Descriptions of some species of the family Phalacridæ in the collection of M. A. Grouville, F. Guillebeau. On the group Epidosis of the family Cecidomyidæ, J. J. Kiefler (continued in pts 2 and 3 same volume). Ibid, pts. 2 and 3.—Contributions to the study of the African Brenthidæ, A. Senna. Buprestidæ collected in tobacco by the diligence of M. A. Grouvelle, C. Kerremans. Nests and metamorphoses of insects, Fourth Memoir, Capt. Xambeu. Ichneumonidæ of Europe (cont.), G. V. Berthoumieu. M. Fairmaire describes a new genus of Coleoptera (no title). Ibid, pt. 4.—Ichneumonidæ of Europe (cont.), G. V. Berthoumieu. M. Leveillé describes some new species of Coleoptera (Temnochilidæ) (no title). J. J. Kieffer gives a preliminary note on the genus *Campylomyza* and describes four new genera (no title). M. F. Guillebeau describes a new genus of Phalacridæ (no title). M. E. Abeille de Perrin describes two new genera of Coleoptera (no title).

18. THE CANADIAN ENTOMOLOGIST, February, 1896.—The Coleoptera of Canada, xiv (Meloidæ), H. F. Wickham. The North American species of *Gnathodus*, C. F. Baker. *Prosopis subtilis*, T. D. A. Cockerell. New Culicidæ from North America, D. W. Coquillett. In reply to criticism, H. G. Dyar. The American species of *Isotoma*, A. D. Macgillivray.

19. PROCEEDINGS OF THE ZOOLOGICAL SOCIETY OF LONDON, 1895, pt. 3.—On a small collection of butterflies sent by Mr. Richard Crawshay from the country west of Lake Nyasa, A. G. Butler. A monograph of the Bornean Lycænidæ, H. H. Druce.

20. BERLINER ENTOMOLOGISCHE ZEITSCHRIFT (published by Entomologischer Verein zu Berlin), Bd. xl. H. 3, 4.—New exotic Coleoptera, A. F. Nonfried. Dipterological studies, iii, Lonchæidæ, Th. Becker. *Midas* or *Mydas?*, C. R. Osten Sacken. Supplement to my recent paper on Lipœneuridæ, ibid. List of Sphingidæ collected by John Fruhstorfer during his residence in Java from 1891 to 1893, A. Huwe.

21. ATTI DELLA REALE ACADEMIA DELLE SCIENZE FISICHE MATEMATICHE, Naples (2), vol. vii.—Review of the Italian Hymenoptera, iii A. Costa.

22. ANNALI DEL MUSEO CIVICO DI STORIA NATURALE DI GENOVA

xxxiv.—A list of the Longicorn Coleoptera collected by Signor Fea in Burma, . . . with descriptions of new genera and species, C. J. Gahan. Hemiptera of the subf. Plataspidinæ collected by L. Fea in Burma and adjacent regions, A. L. Montandon. Voyage of L. Fea in Burma, etc.: Curculionidæ, J. Faust. Elateridæ collected by Dr. E. Modigliani, . . . in Sumatra, E. Candeze. Contribution to our knowledge of the Diplopoda of Laguria, R. I. Pocock. New species of Anthicidæ . . . , M. Pic. Chilopods and Diplopods of Papuasia, F. Silvestri. List of some *Collembola* of the Argentine Republic, E. Parona. On Chilopods and Diplopods of Sumatra, etc., F. Silvestri. Chilopods and Diplopods collected by Capt. G. Bove and Prof. L. Bazan in America Meridional, ibid. The Myriopoda of Burma, iv (Polydesmoidea), R. I. Pocock. Ibid, vol. xxxv. —Exploration of Guiba and the surrounding countries by Capt. V. Bottejo . . . Zoological results: Orthoptera, H. de Saussure; Plataspidinæ, A. L. Montandon: Rhynchota, A. DeCarlini; Diptera, E. Corti; Hymenoptera, P. Magretti; Formicidæ, C. Emery; Dytiscidæ and Gyrinidæ, M. Régimbart; Staphylinidæ, E. Eppelsheim; Melolonthini and Rutelini, E. Brenske; Anthicidæ and Pseudoanthicidæ, M. Pic; Curculionidæ, J. Faust; Coleoptera, R. Gestro; Chilopoda and Diploploda, F. Silvestri; Arachnida, P. Pavesi; Acaria, C. Parrona.

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Doings of Societies.

PHILADELPHIA, Feb. 11, 1896.

A stated meeting of the Feldman Collecting Social was held at the residence of Dr. Henry Skinner, No. 716 N. 20th Street. Members present: Messrs. Laurent, Trescher, Hoyer, H. W. Wenzel, Johnson, E. Wenzel, Griffith, Bland, Fox, Seiss, Castle, Boerner and Schmitz. Honorary members: Drs. Horn, Smith and Skinner. Visitors: Messrs. Lancaster Thomas, W. J. Gerhard, Charles Liebeck and Dr. W. E. Hughes. Meeting called to order at 9 P.M., President Bland presiding. After the reading of the minutes of the previous meeting, Dr. Horn, referring to Dr. Skinner's suggestion of his method of arranging males and females for their better identification, gave his views on the matter . . . . stating in conclusion that, in his opinion, every specimen should be marked with sex labels. In a later discussion between Horn, Smith and Skinner, regarding the labeling, numbering

and use of vari-colored papers for the easy determination of species, localities, etc. Dr. Skinner stated that, in his opinion, the most important thing was to mark the date and locality, as it has frequently occurred in going over collections of deceased collectors where specimens were mounted with colored labels, numbered or lettered in reference to lists, such lists could generally not be found.

Prof. Smith exhibited proofs of illustrations which are to appear in his next annual report, explaining his method of preparing his plates, whereby he obtained such clear, sharp prints with almost a pure white background.

Mr. Johnson exhibited specimens of *Sargus nebeculosus* Zett., an introduced European species; about fifty specimens were collected near Newark, N. J., June 12–16, 1892; they were identified by comparison with some European specimens in the U. S. National Museum. The speaker states that they are the only North American specimens he has seen.

Mr. Liebeck exhibited a case of Melandrydæ and Pyrochroidæ, which he states is very near a complete collection. In habits these insects infest the bark and fungus on trees and logs. The collection was viewed with much interest.

Dr. Griffith exhibited a number of Curculionidæ from Brazil, which represents part of a large collection sent him.

Mr. Laurent exhibited what he termed the Lancaster Thomas exhibiting cabinet, which consisted of a case made in the usual way, having looking-glass placed in the bottom; the specimens are mounted on pieces of cork cemented to the glass; by this method all markings can be seen underneath the specimens at a glance without removing them from the cabinet.

Mr. Fox referred to a former communication by Prof. Smith on certain modifications of the hairs of bees and Diptera. The speaker had made an examination of a number of the fossorial Hymenoptera and found in most species the hairs are simple. In some Mutillidæ, however, the hairs are barbate, and the Scoliidæ, in which family the hairs are short and stout, some species have them translucid medially and crossed by oblique striations.

No further business being presented the meeting adjourned to the annex at 10.45, where Dr. Skinner again showed his hospitality in a substantial way. Mr. Bland presided at the banquet. Dr. Skinner, as toast master, called on Messrs. Bland, Horn

and Smith to respond to the toasts on Entomology—past, present and future, other toasts following in order.

THEO. H. SCHMITZ, *Secretary*.

The Entomological Section

ACADEMY OF NATURAL SCIENCES, PHILADELPHIA.

PROCEEDINGS OF MEETINGS.

The following paper was read and accepted by the Committee for publication in ENTOMOLOGICAL NEWS:

A NEW SPECIES OF MELEOMA.

By NATHAN BANKS.

Meleoma slossonæ n. sp.—Length 18 mm. Pale green, an indistinct yellowish stripe on middle of thorax, black stripe on cheek from eye to mouth, palpi mostly black, in ♂ a small black dot on innerside of basal joint of antennæ; antennæ wholly pale, a brown mark at each anterior corner of the pronotum, veins of wings green, some of the cross-veins partly black, pterostigma opaque. Bases of antennæ widely separated, basal joints diverging, in the ♂ the third joint is swollen on the innerside and concave outside, and much larger than in the ♀; between the antennæ in the ♂ is a short horn, about as long as broad, trifid at tip, the median part slightly longer and acute; on the middle of the face is a bunch of pale hairs; in the ♀ there are only some sutures indicating somewhat the shape of the horn of the ♂; above on the vertex, in both sexes, is a rounded transverse ridge; on the pronotum a somewhat elevated portion each side as in *M. signoretti;* wings slightly acute at tips, venation as in *M. signoretti*.

Several specimens from Mt. Washington and Crawford Notch, N. H., collected by Mrs. Annie T. Slosson.

This species is separated from *M. signoretti* Fitch:

First, by its larger size, the latter being about 16 mm. long.

Second, *M. signoretti* has no marks on the cheeks, and the palpi are pale.

Third, the horn of *M. signoretti* is as long as the basal joint of the antennæ, in *M. slossonæ* it is not half as long; in the former the tip is deflected, bifid and with a recurved median tooth.

Fourth, on the face of *M. signoretti* are two smooth brown elevations, not present in *M. slossonæ*.

Fifth, the third joint of the antennæ of *M. slossonæ* is enlarged and curved, my only male of *M. signoretti* lacks the antennæ, except the basal joints, but Fitch does not mention any such character.

Sixth, Fitch says antennæ brownish, in *M. slossonæ* they are pale.

A ♀, probably of *M. signoretti*, from Mt. Washington, has much resemblance to *Chrysopa nigricornis*, but is smaller, and the basal joints of antennæ are more slender and farther apart than in *Chrysopa;* there is no dot on the basal joint, the rest of antennæ is brown; there is a black dot each side near the base of the clypeus, the palpi are pale.

Since the presence of the horn in *Meleoma* is a secondary sexual character, the genus can best be separated from *Chrysopa* by the widely separated and more slender basal joints of the antennæ. *M. signoretti* has fine vertical hairs on the front of the horn, giving it the striated appearance noted by Fitch. *M. slossonæ* appears to be the more common form.

OBITUARY.

T. B. ASHTON, of Tonganoxie, Kans., died Dec. 28, 1895, aged 69 years. A native of Washington County, New York; he was always interested in Entomology, and was especially devoted to the Coleoptera. He was one of the charter members and assisted in organizing the Entomological Society of Philadelphia, the latter part of February, 1859, and was the personal friend of such eminent entomologists as Dr. John L. LeConte, E. T. Cresson, of Philadelphia; Dr. Asa Fitch, of New York, and was also well acquainted with many of the leading entomologists of America. He was a skillful and persistent collector of Coleoptera, and gathered a large and valuable collection, which was largely increased by exchanges. Although not a voluminous writer, he occasionally contributed articles to eastern entomological publications, an interesting paper appearing in ENTOMOLOGICAL NEWS, vol. iv, May, 1893. He had great mechanical ingenuity, making his own cases for his collections. One daughter survives him.

WARREN KNAUS.

ENTOMOLOGICAL NEWS for February, was mailed January 31, 1896.